beauty&truth MATH

Mathematics in a Charlotte Mason Education

ARITHMETIC

YEAR 4 BUNDLE

Beauty & Truth Math

- Mathematics in a Charlotte Mason Education -

ARITHMETIC

YEAR 4 BUNDLE

Used in conjunction with (or Complemented by)

STRAYER-UPTON PRACTICAL ARITHMETICS, SECOND BOOK

by George Drayton Strayer and Clifford Brewster Upton

ARITHMETIC • YEAR 4 BUNDLE

"*Never are the operations of Reason more perfect and more delightful than in mathematics. Here, men do not begin to reason with a notion that causes them to lean to this side or to that. By degrees, absolute truth unfolds itself. We are so made that truth, absolute and certain truth, is a perfect joy to us; and that is the joy that mathematics affords.*"
(Charlotte Mason, Vol. 4, pp. 62-63)

"*How sad that this subject, ethereal as faery and powerful beyond telling, should find no other adjective than 'useful' to justify us in imparting it to our children. Number to the philosophers of old was a touchstone of learning; it was worthy of their greatest respect and deepest thought. Let us take this gift with the others they have given us; this thought of Number as worthy of our best, aesthetically satisfying as an art, beckoning onward as a science, and luring us ever forward towards increasingly enchanting prospects ahead.*"
(Stephens, Number: A Figure and a Step Onward, p. 4)

"*And if our boys and girls can be brought to feel that arithmetic is a game—a noble game—one of the noblest though not one of the most spectacular that the human race has played—and that it is an honour and a privilege to play at it; and if we can keep that feeling alive by the right exercise and the apt stimulus, cunningly applied with a smile and a jest, as becomes so noble a game, the arithmetic lesson will cease to be a dismal grind and become a grand pursuit full of glamour and excitement.*"
(Ballard, Teaching the Essentials of Arithmetic, p. 34)

WELCOME

Thank you for purchasing this full-year guide! We are humbled and honored by your support. Please read through this introduction carefully. Understanding our approach is vital to maximizing the benefits of each guide.

THE VISION

Beauty & Truth Math exists to assist students AND teachers in the realm of mathematics in a Charlotte Mason education. It is possible to simply read the scripted lessons and check your students' answers. However, this keeps the teacher from being an engaged and involved partner in the learning process.

These lessons are written with the idea that the teacher will be *working with* the students, asking questions, having discussions, and monitoring progress. Each lesson is an opportunity for building relationships between you, your students, and the Lord. Please make the most of this time together, walking beside your students in exploring and understanding mathematical ideas.

We thoroughly believe that math done completely in isolation misses opportunities to make deep connections. Just like a foreign language needs to be communicated and spoken to make connections, math is its own language with its own big ideas that are best learned through discussion.

You are working with *living* born persons; our goal is to provide a *living* education. *Living* involves changes and adaptations. These lessons are guides and servants, not masters you must follow. Please use the Spirit's wisdom when discerning what you should modify, skip altogether, push forward on, or slow down on as you and your students are on this journey.

CONTACTING US

We welcome feedback and questions! For general inquiries, please email us at contact@beautyandtruthmath.com.

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WEBSITE LINKS DISCLAIMER

PLEASE PREVIEW LINKS BEFORE USING! While we have done our best to ensure all sites we link to are appropriate, we do not have any control over changes made to them.

We are thankful for the free resources other sites make available and want to support them whenever possible. As they generate revenue through traffic on their sites, we link directly to their pages.

In many cases, there will be multiple worksheets provided on the pages linked. Most of the time, we will specify which worksheet is needed in the guide. Sometimes, you will need to choose the worksheet. This will be stated in the guide as well.

It is the teacher's final responsibility to ensure the content is age-appropriate for the lessons. Please email us at contact@beautyandtruthmath.com to report broken links.

READY, SET, GO!

"Putting in the work up front to make the school days run easy."

We have created three folders to easily access the entire year of teacher help documents and printables included in this guide. Their unique QR codes and links are included in multiple places in this introduction and are shown here for easy identification.

We will walk you through how to use these linked folders in the following few pages, so please don't worry about viewing them now. This page is simply an introduction to them.

Important Teacher Helps – This folder contains helpful resources to assist and support you as you implement math in a Charlotte Mason education. It includes the following documents:

- A CHARLOTTE MASON MATH EDUCATION lays out a vision for a Charlotte Mason math education.
- THE ARITHMETIC PROGRESSION provides an overview of arithmetic in the Beauty & Truth Math Guides using Charlotte Mason's philosophy. Sources include PR articles & books recommended in the PUS Programmes.
- ALL ABOUT THE GUIDES is everything you need to know about the guide's setup.
- FORMS 1&2 REVIEW ACTIVITIES is a treasure trove of various review activities organized by topic. Use these to keep review time lively and engaging.
- FAQs is a list of questions we frequently answer from our customers. This document is a living document and will be updated occasionally.
- SUPPORT VIDEOS LIST is a compiled, linked list of support videos in this guide.
- ADDITIONAL SUPPLEMENTAL RESOURCES provide extra teacher support.

Cardstock Printables – This folder contains all resources that need to be printed on cardstock, as these will be used with your students multiple times throughout the lessons.

Printables – This folder contains all of the consumable printables for your students. Sometimes, you will need several copies.

GET READY!

- **SEE** the **Materials Needed** section in this guide to determine what materials you have and still need to purchase.

- **CHECK OUT Our Favorites** on our website. This is a list of recommendations we have compiled to help you prepare and organize your materials.

- **PRINT** the FORMS 1&2 REVIEW ACTIVITIES document in the **Important Teacher Helps** folder.
    - We recommend printing it on colored paper to make it easy to find. *You only need to print this document once for all your Form 1&2 students.*

- **PRINT ALL OF THE DOCUMENTS** in the **Cardstock Printables** folder. You will use these documents multiple times, so we recommend using cardstock. Some may need to be cut apart as well.

- **PRINT AT LEAST THE FIRST TWO WEEKS** of materials in the **Printables** folder. In the **Materials Needed**, we list how many copies you need for the entire year. Feel free to print all of them ahead of time or print them only a week or two in advance. You can find these documents listed under the Special Materials Needed section of the Weekly Resources Pages for Weeks 1 and 2.

- **DECIDE** if you will print the guide or use it on a screen.

GET SET!

- **READ THROUGH THE FOLLOWING <u>IMPORTANT TEACHER HELPS</u>:**
  - A CHARLOTTE MASON MATH EDUCATION
  - THE ARITHMETIC PROGRESSION
  - ALL ABOUT THE GUIDES
- **Learn how to implement the guides in daily life.** Read through the **<u>Putting It Altogether</u>** section of this guide.
- **Prepare your materials.** There is no one right way to do this! The following list is simply a compilation of ideas Beauty & Truth Math users have found helpful.
  - **Create a student math notebook for each student.**
    - Fill it with grid paper. In general, we recommend ½" squares. Some students may need larger squares based on their writing ability.
    - Create sections in the notebook for daily assignments, a math vocabulary page, and a reference section. It is up to you and your student how to order these. If applicable, create different sections for the different streams of math.
    - Decide if you will have your student write headings for each assignment. Information such as the date and page number are great things to include. Writing the problem number and showing the final answer, either with a box or circle around it, are also strongly encouraged. We recommend starting this in Year 2 or 3.
  - **Put together a teacher math notebook for yourself.**
    - Create sections for your personal calendar, the lessons from the guides, printable & supplementary resources, exams, notes, etc.
  - **Find a place for the Cardstock Printables.**
    - These could be stored in a folder in your teacher notebook or an accordion file folder. The goal is to keep them accessible and in good condition since you will use them often.
  - **Use tabs to label and easily find what you need!**
    - Tab each topic in the FORMS 1&2 REVIEW ACTIVITIES document (from the Important Teacher Helps folder).
    - In the Strayer-Upton books, tab the following:
      - Where you are at for the current lesson, and the corresponding answer key section in the back
      - Review & mental math pages
  - **Have individual containers for each of your student's supplies.**
  - **Decide how to store card sets**.
    - We recommend placing them in plastic bags and storing them in an index card holder or binder pouch.

GO!

Any author of math textbooks or guides will tell you that we write in order to accommodate as many students as possible, and we provide more than is needed. You have complete freedom not only to modify the lessons, but also to adjust the number of problems assigned to meet the needs of your students.

Each week, you will need to do the following:

- Look over the new lessons to be covered with your student. Understand the big ideas and objectives.
- Choose review assignments to use with your students. These assignments build depth in highlighting and understanding different number relationships. When choosing what to review, consider three things:
    1) What areas do my students require more practice to solidify concepts?
    2) What topics have we not reviewed in a while?
    3) What assignments would give my students a reprieve and easier lesson to build their confidence and enjoyment of math?
- Choose mental math problems to use throughout the week, if needed.
- Take the Beauty & Truth Math Guide Vow – I do solemnly promise that I will remember and implement the following statements:
    - I have permission from Charlotte Mason and the authors of these lessons to adjust or modify any lesson, at any time, to provide a living education to my unique, born persons.
    - I have permission from Charlotte Mason and the authors of these lessons to assign fewer problems than written in the lessons to provide a living education to my unique, born persons.
    - I have permission from Charlotte Mason and the authors of these lessons to assign more problems than written in the lessons to provide a living education to my unique, born persons.

      "...the educator has to deal with a self-acting, self-developing being, and his business is to guide, and assist in, the production of the latent good in that being, the dissipation of the latent evil, the preparation of the child to take his place in the world at his best, with every capacity for good that is in him developed into a power." (Mason, Vol. 1, p. 9)

- Pray for joy and wisdom as you set out each day exploring mathematical truths with your students. Now dive right into using the lessons, confident that the Lord is with you and for you!

ALL ABOUT THE YEAR

SEEING THE BIG PICTURE

There is NOT a one size fits all way to teach math using the Charlotte Mason method. Our guides are one option for teachers to use. We have created them to be adaptable to each unique student, both in the big picture and in the guides' details.

We have designed our curriculum to imitate the math streams used in Charlotte Mason's schools. Students have several options for the tracks and combinations of these streams. For more information, see our **Scope & Sequence** page on our website.

Additionally, **The Guides' Big Ideas** page on our website shows the main ideas throughout the years.

YEAR OVERVIEW

In Year 4, the focus is on fractions. Students learn how to add, subtract, multiply, and divide fractions. At the heart of all of these is the idea of equivalent fractions. Extensive time is spent looking at fraction families and how they are connected.

There are many other ideas covered as well, such as factors, multiples, long division, measurements, decimals, perimeter, and surface area. Year 4 is a significant year in students' math adventures. Many big ideas are introduced, the length of the lesson is increased to 30 minutes, and the list of materials needed is longer than most years. Everything is included to provide students with a strong foundation.

We want students to get in the habit of clearly labeling their work. In Year 4, we recommend having students include the date and page number for all assignments. While working, we want the students to develop the habit of writing each problem number and marking each answer by putting a circle or box around it.

The **maximum** lesson time for students in Year 4 is 30 minutes.

EVERY DAY & SPECIAL MATERIALS

We assume students will always have their pencil, math notebook with grid paper, grid dry-erase board, and dry-erase marker handy for lesson time. Any additional materials beyond these items are listed in the Special Materials Needed sections.

CARDSTOCK PRINTABLES VS. PRINTABLES

The teacher must prepare all cardstock printables before the term begins. The cardstock printables are listed as special materials, but links are not provided. Links for the Printables Folder are always provided in the special materials.

MONEY

Money is one of the primary manipulatives we use in the guides. We highly recommend using real coins if at all possible. For the dollar bills, we have created a cardstock printable with various denominations.

THINGS TO LOOK FORWARD TO THIS YEAR

This list highlights the special features and noteworthy things throughout the year. These items are expounded on in each term introduction.

- The Details Matter
- Math Jeopardy
- All About Pages
- Ongoing Reference Pages
- Multiplication Guidelines
- Math Vocabulary Page
- Equivalent Fractions Page
- Sieve of Eratosthenes

MATERIALS NEEDED FOR THE ENTIRE YEAR

- 1 Gummy Bear
- 12 Books
- 2 Paper Plates
- 2 Pool Noodles (different colors)
- 20 Square Inches (cut apart)
- 27 1" Blocks
- 30 Sugar Cubes
- 4 Apples
- 4 Dice
- 4 Pieces of Construction Paper or Cardstock
- 40 Two-Color Counters
- 5 Pieces of Construction Paper (same size, different colors)
- Area & Perimeter Worksheet
- At least 20 Interlocking Blocks (same size, various colors)
- Bathroom Scale (that can weigh kilograms, if available)
- Beads - 16 Blue and 8 White
- Brand-New Pencil (unsharpened)
- Calendar
- Candy Bar or Granola Bar (divided into six sections)
- Clock
- Colored Pencils
- Containers - Liter, Milliliter, Quart, Pint, Gallon
- Decimal Sequences
- Deck of Playing Cards

Our Favorites

Check out our recommendations to see if any of them would be helpful to you in preparing and organizing your materials.

Everyday Materials

- Grid Dry-Erase Board
- Dry-Erase Marker
- Notebook with ½" Grid or Graph Paper
- Pencils

Cardstock Printables

- All About Fractions & Decimals
- All About Multiplication & Division
- All About Place Value
- Common Decimal Cards
- Equivalent Fractions
- Fraction Cards (All Sets)
- Hundredths Cards
- Measuring Dry Volume Cards
- Measuring Length Cards
- Measuring Liquid Volume Cards
- Measuring Time Cards
- Measuring Weight Cards
- Metric System Cards
- Multiplication Table Chart
- Number Cards
- Number Chart
- Options for Math Vocabulary Page
- Place Value Labels & Numbers

- Factors & Multiples Worksheet
- Globe or Map (showing various time zones)
- Glue
- Graham Crackers
- Highlighter
- Index Cards
- Internet Access
- Items to Weigh (heavy and light)
- Jar (filled with gumballs or any type of small toy or candy that usually costs a quarter)
- Kitchen Items - 20 Water Bottles, 12 Cans of Food
- Kitchen Scale (that can weigh grams)
- Knife
- Large Dry-Erase Board or Space on the Floor or Wall (to mark off a square foot and square yard)
- Lunch Food (sandwiches, fruit, etc.)
- Markers
- Masking or Painter's Tape (if using space on the floor or wall)
- Measuring Cup
- Measuring Tape
- Meter Stick
- Money - 60 Pennies, 40 Dimes, 10 Quarters, 1 Half-Dollar (if available)
- Multiplying Fractions Word Problems
- Multiplying Fractions Worksheet
- Only if Needed
    - Containers - Ounce, Cup, Pint, Quart, Gallon, Peck, Bushel
- Pretend Money - 24 $1 Bills, 5 $5 Bills, 24 $10 Bills, 12 $100 Bills, 12 $1,000 Bills
- Roman Numeral Cards
- Roman Numeral Reference Sheet
- Sieve of Eratosthenes (This is found in the Important Teacher Helps folder.)
- Tenths Cards

Printables

- Areas
- Decimal Mix-Up
- Dividing Fractions Intro Cards
- Divisibility Puzzle
- Divisibility Rules Review
- Eighths
- Exercise 27
- Exercise 38
- Exercise 39
- Fractions
- Gardens
- Gummy Bear Lab Chart
- Halves and Quarters
- Measuring to Quarters of an Inch
- Number Charts (at least 3)
- Perimeters
- Prime or Composite Worksheet
- Review of Measures Worksheet
- Strayer-Upton, Book 2: p. 95
- The Clock

    - Kitchen Access
    - Water
- Perimeter Worksheet 
- Permanent Marker
- Posterboard or Large Paper
- Ream of Printer Paper (if available)
- Ruler
- Scissors
- Small Gift Box (preferably a rectangular box)
- Small Ingredient (i.e., beans, rice)
- Sticky Notes (labeled units, tens, hundreds, thousands)
- Sticky Tabs (four different colors)
- Stopwatch
- Straightedge (i.e., ruler, edge of a book or notebook. Anything that will assist in drawing a straight line.)
- String or Ribbon
- Surface Area Worksheet 
- Tape
- Unlined Paper
- Water
- Wrapping Paper
- Yardstick

beauty&truth MATH

Mathematics in a Charlotte Mason Education

ARITHMETIC

YEAR 4 • TERM 1

• WEEK 4 RESOURCES •

YEAR 4. TERM 1. WEEK 4

OVERVIEW

This week, we will focus on investigating fractions more. We look at fractions as a way to notate division, write simple remainders as fractions, and the difference between proper and improper fractions.

BIG IDEAS NEEDED BEFORE BEGINNING

- Fractions as Part of One Whole
- Fractions as Part of a Group

SUGGESTED PACE

Day 1: Fractions as Division
Day 2: Ways to Express Division
Day 3: Writing a Remainder as a Fraction
Day 4: Proper and Improper Fractions
Day 5: Review/Catch-Up

ONGOING REFERENCE PAGES

- Math Vocabulary Page
- All About Fractions
- Dry Measures Table (p. 187)

MENTAL MATH IDEAS

- 21

SPECIAL MATERIALS NEEDED

- 2 Apples
- Knife
- All About Fractions & Decimals
- Two-Color Counters
- Math Vocabulary Page
- Money - Dimes, $1 Bills
- Ruler

SUGGESTED REVIEW

- Fractions (Y4.T1.W3): 62, 63, 64
- Division (Y3.T3.W4): 31 *Review vocabulary and how to check a division problem.*
- Problem Solving: 12

• Fractions as Division •

Y4. T1. W4. L1

SUBJECT

Arithmetic

RESOURCES USED

Strayer-Upton, Book 2 (p. 65)

OBJECTIVES

Students will be able to express fractions as division.

SPECIAL MATERIALS NEEDED

2 Apples, Knife, All About Fractions & Decimals

THE PLAN

1. Tell what you know of a fraction. *Draw out the idea of parts of a whole or parts of a whole group of things.* What is a numerator? (The top number of the fraction, and it represents how many parts have been taken.) Denominator? (The bottom number of the fraction, and it represents the total number of parts.)
   Can you look around the room and see something that is in halves? Thirds? Fourths?
2. Let's think more about fractions today. You have two apples and want to share them among 3 friends.
   a. How would you do that so each friend would have the same amount? What part of the apple would each get? ($\frac{2}{3}$) *Allow the student time to think. If help is needed, you could ask, "How would you share one apple among three friends?" After the student cuts the apple into thirds, ask, "What could you do with the second apple?" Again, the student would cut the second apple into thirds. Then ask, "How could we share these pieces equally?"*
3. While covering up the explanation, read and answer the top example problem on p. 65. *If needed, allow the student to complete this activity to ensure understanding with manipulatives. Instead of apples, you could use pieces of paper, i.e., dividing three pieces among four friends. What part of the paper would each get?* ($\frac{3}{4}$)
4. So what mathematical operation (addition, subtraction, multiplication, division) does a fraction represent? (A fraction represents division.)
5. Draw the division sign on your dry-erase board. (÷)
   a. Does this remind you of a fraction in any way?
   b. What would happen to the two dots if you changed this to a fraction? (The dots go away, and those spaces are where the numbers go - the numerator and the denominator.)

6. Go back to the two example problems. How would you write the answers to each of those? ($\frac{2}{3}$, $\frac{3}{4}$)
7. Complete p. 65: 1-5 out loud.
8. What if you have ten apples and wanted to share those with just yourself?
    a. How many would you get? (10 apples)
    b. How could you write that in fraction form? ($\frac{10}{1}$)
    c. How much of a stomach ache would you have? 😊🚚
9. Read p. 65: 6. What is any number divided by 1? (1)
10. Complete p. 65: 7, 10, 13, and 16 out loud.

STUDENT RESPONSE

1. In your math notebook, complete p. 65: 8, 9, 12, 15, and 18.
2. Add to the All About Fractions page.

• Ways to Express Division •

Y4. T1. W4. L2

SUBJECT

Arithmetic

RESOURCES USED

Strayer-Upton, Book 2 (p. 66, top section)

OBJECTIVES

Students will be able to express division in four different ways.

SPECIAL MATERIALS NEEDED

Two-Color Counters, Math Vocabulary Page

THE PLAN

1. We talked about fractions and division in the last lesson. Tell me about that. *Draw out the idea of a fraction is a way to write a division problem.*
2. To review some of the ideas we discussed, can you show the following using counters? Try to use a different number of counters for each answer.
    a. A group of counters where $\frac{1}{2}$ is red. (An example answer is six counters in all. Three are red, three are yellow.)
    b. A group of counters where $\frac{3}{4}$ is red. (An example answer is four counters in all. Three are red, and one is yellow.)
    c. A group of counters where $\frac{2}{2}$ is red. (All counters are red.)
    d. A group of counters where $\frac{0}{4}$ is red. (No counters are red.)
3. Let's say that you need to divide 42 by 3. There are several ways that can be written. Which ones do you know? ($42 \div 3$, $3\overline{)}42$, $\frac{1}{3}$ of 42, and $\frac{42}{3}$) *Allow the student time to think. Ask questions to help guide the student's thinking if assistance is needed.*
4. Looking at the top section on p. 66, complete 1-9 out loud.
5. Now, imagine you had 3 oranges shared equally among 3 friends.
    a. How many would each friend get? (1 orange)
    b. Can you write that as a fraction? ($\frac{3}{3}$)
    c. Read p. 66: 10 (top section). What do you think? (Yes, Ruth is correct.)

STUDENT RESPONSE

1. In your math notebook, complete the following.
    a. Choose one problem from p. 66 1-9 (top section) to write all four ways of expressing division.
    b. Complete p. 66: 11 (top section) out loud. Choose one to write in your math notebook.
2. On your Math Vocabulary Page, add the word **fraction**. Be sure to include as much as possible about the word and an illustration. Leave some extra space underneath the word as you may want to change it or add to it as you learn more.

• Writing a Remainder as a Fraction •

Y4. T1. W4. L3

SUBJECT

Arithmetic

RESOURCES USED

Strayer-Upton, Book 2 (p. 66, bottom section)

OBJECTIVES

Students will be able to understand and write a remainder of a division problem as a fraction.

SPECIAL MATERIALS NEEDED

None

SPECIAL NOTE

After the student completes this lesson, please have him practice writing the remainder of division problems completed in review assignments throughout the rest of Term 1 and 2. We will look at remainders as fractions with long division in Term 3.

THE PLAN

1. From our last lesson together, can you tell me about all the different ways you can write division? (÷, $\frac{}{}$, a unit fraction of total, fraction) Which way do you like best? Let's think a little bit more about division today.
2. Imagine that you shared nine cookies equally among four friends. *Have the student draw a picture of the problem if needed.*
    a. How many whole cookies did each of you get? (2 whole cookies and 1 cookie is left over.)
    b. What if you shared the remaining cookie as well? How much of the cookie would each of you get? ($\frac{1}{4}$ of the leftover cookie)
    c. How would you write the full equation? ($9 \div 4 = 2\frac{1}{4}$)
3. What if you shared seven cookies equally between two friends?
    a. How many whole cookies does each person get? (3 whole cookies)
    b. How many cookies are left over? (1 cookie)
    c. What if you shared the remaining cookie as well? How much of the cookie would each friend get? ($\frac{1}{2}$ of the leftover cookie)
    d. How would you write the full equation? ($7 \div 2 = 3\frac{1}{2}$)

4. So how can we write remainders in division problems? (As a fraction)
    a. Is the remainder the numerator or denominator? (Numerator)
    b. And what is the denominator? (The divisor)
5. Complete p. 66: 1-2 (bottom section). Draw a picture to help visualize if needed.
6. Complete p. 66: 3 (bottom section) on your dry-erase board.

STUDENT RESPONSE

1. In your math notebook, complete p. 66: 4, 7, and 11 (bottom section).

• Proper and Improper Fractions •

Y4. T1. W4. L4

SUBJECT

Arithmetic

RESOURCES USED

Strayer-Upton, Book 2 (p. 67)

OBJECTIVES

Students will be able to investigate and define proper and improper fractions.

SPECIAL MATERIALS NEEDED

Money - Dimes, $1 Bills, Ruler, All About Fractions & Decimals, Math Vocabulary Page

THE PLAN

1. To review the last few lessons, tell me everything you know about fractions. *Draw out the idea that fractions can be parts of one whole or parts of a group. They are a way to write division.*
2. Get $1 out. This is one whole dollar.
    a. Which coin represents a whole dollar broken up into tenths? (dime)
    b. How many dimes make up a dollar? (10 dimes)
    c. How would we write ten tenths as a fraction? ($\frac{10}{10}$)
    d. What does that make? (1 whole dollar)
    e. Compare the numerator and denominator? (They are the same.)
    f. So $\frac{10}{10}$ = 1 or 10 divided by 10 = 1
3. Show me $\frac{9}{10}$ of a dollar. (9 dimes)
    a. Is the numerator more or less than the denominator? (less)
    b. Is $\frac{9}{10}$ of a dollar more or less than one whole dollar? (less)
4. Show me $\frac{13}{10}$ of a dollar. (13 dimes)
    a. Is the numerator more or less than the denominator? (more)
    b. Is $\frac{13}{10}$ of a dollar more or less than one whole dollar? (more)
    c. *If the student needs additional practice, complete p. 67: 1-4 out loud.*
5. Complete p. 67: 5.

6. *Write* $\frac{7}{8}$, $\frac{8}{8}$, *and* $\frac{9}{8}$ *on a dry-erase board.* Fractions such as $\frac{7}{8}$ are called **proper fractions** and fractions such as $\frac{8}{8}$and $\frac{9}{8}$ are called **improper fractions**. What do you think is the difference between the proper and improper fractions? (Proper fractions are less than 1, and improper fractions are equal to or more than 1.) *If needed, ask the student things like...Compare the numerators and denominators. How do they compare to one whole unit? Smaller or larger than 1?*
7. Read the last paragraph on p. 67 starting with, "A **proper fraction** is always smaller than 1..." 🚚
8. Complete p. 67: 6 out loud.

STUDENT RESPONSE

1. On your All About Fractions page, write an example of a proper fraction, an improper fraction, and a fraction that equals 1.
2. On your Math Vocabulary Page, describe **proper** and **improper fractions**. Be sure to provide examples of each.